

CLAIMS

1. (Currently Amended) A method comprising:

receiving an instruction specifying additional per-frame DV metadata to extract from a DV data stream, wherein the instruction comprises at least one of:

an AddPack call to add [the]a DVPackID to an extraction list stored in memory;

a RemovePack call to remove the DVPackID from the extraction list; or

a RemoveAllPacks call to remove all DVPackIDs from the extraction list;

and

extracting the metadata from a DV frame of the DV data stream in response to the instruction, wherein the extracting comprises:

determining [a]the DVPackID from an extraction list; and

identifying the metadata within the DV frame based on the DVPackID.

2. (Previously Presented) A method as recited in claim 1, further comprising:

storing the metadata in a container; and

attaching the container to a video sample of the DV frame.

3. (Canceled)

4. (Previously Presented) A method as recited in claim 1, further comprising:

returning a number indicating an amount of DVPackIDs present in the extraction list in response to a GetCount call; and

returning a DVPackID at an index in the extraction list in response to a GetPackID call that specifies the index.

5. (Canceled)

6. (Previously Presented) A method as recited in claim 2, further comprising managing the container.

7. (Previously Presented) A method as recited in claim 6, wherein the managing the container comprises:

adding a DV_METADATA structure to the container in response to an Add call;

removing a DV_METADATA structure from the container in response to a Remove call;

removing all items from the container in response to a RemoveAll call;

returning a number indicating an amount of items present in the container in response to a GetCount call;

locking the container for exclusive access in response to a Lock call;

unlocking the container in response to an Unlock call;

retrieving an item from the container at a beginning index of the container in response to a GetFirst call; and

retrieving an item from the container at a next index of the container in response to a GetNext call.

8. (Previously Presented) A method as recited in claim 7, wherein the DV_METADATA structure comprises an unpacked version of a DV metadata pack.

9. (Previously Presented) A method as recited in claim 8, wherein the DV_METADATA structure comprises:

binary values unpacked from the DV metadata pack; and

a different variable name associated with each binary value.

10. (Currently Amended) A method as recited in claim 1, further comprising:
demultiplexing the DV frame to generate [the]a video sample and an audio sample.

11. (Canceled)

12. (Previously Presented) A method comprising:

managing a DV metadata extraction list stored in memory; and

extracting a DV metadata pack from a DV frame based on a DVPackID within the extraction list, wherein the extracting includes:

identifying the DV metadata pack in the DV frame through a header in the DV metadata pack that contains the DVPackID; and

pulling the DV metadata pack out of the DV frame.

13. (Previously Presented) A method as recited in claim 12, further comprising storing the DV metadata pack into an IMFDMetadataContainer.

14. (Previously Presented) A method as recited in claim 13, further comprising attaching the IMFDVMetadataContainer to a DV sample of the DV frame.

15. (Previously Presented) A method as recited in claim 13, further comprising unpacking the DV metadata pack into a DV pack-specific data structure.

16. (Previously Presented) A method as recited in claim 15, further comprising storing the DV pack-specific data structure into the IMFDVMetadataContainer.

17. (Previously Presented) A method as recited in claim 15, wherein the DV pack-specific data structure comprises:

binary values unpacked from the DV metadata pack; and

a different variable name associated with each binary value.

18. (Previously Presented) A method as recited in claim 12, wherein the managing comprises:

adding a DVPackID to the extraction list in response to an AddPack call;

removing a DVPackID from the extraction list in response to a RemovePack call;

removing all DVPackIDs from the extraction list in response to a RemoveAllPacks call;

returning a number indicating an amount of DVPackIDs present in the extraction list in response to a GetCount call; and

returning a DVPackID at an index in the extraction list in response to a GetPackID call that specifies the index.

19. (Canceled)

20. (Previously Presented) A method as recited in claim 13, further comprising managing the IMFDVMetadataContainer.

21. (Previously Presented) A method as recited in claim 20, wherein the managing the IMFDVMetadataContainer comprises:

adding a DV_METADATA structure to the IMFDVMetadataContainer in response to an Add call;

removing a DV_METADATA structure from the IMFDVMetadataContainer in response to a Remove call;

removing all items from the IMFDVMetadataContainer in response to a RemoveAll call;

returning a number indicating an amount of items present in the IMFDVMetadataContainer in response to a GetCount call;

locking the IMFDVMetadataContainer for exclusive access in response to a Lock call;

unlocking the IMFDVMetadataContainer in response to an Unlock call;

retrieving an item from the IMFDVMetadataContainer at a beginning index of the IMFDVMetadataContainer in response to a GetFirst call; and

retrieving an item from the IMFDMetadataContainer at a next index of the IMFDMetadataContainer in response to a GetNext call.

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Previously Presented) A method comprising:

managing DVPackIDs in a DV metadata extraction list based on method calls to a metadata extraction API (application programming interface);

extracting a DV metadata pack from a DV frame based on a DVPackID within the extraction list stored in memory;

unpacking the DV metadata pack into a DV pack-specific data structure;

storing the DV metadata pack and the DV pack-specific data structure in a container that is stored in memory;

attaching the container to a video sample of the DV frame; and

managing access to the container based on method calls to a container API.

26-29. (Canceled)

30. (Currently Amended) A computer comprising:

a DV metadata extraction tool configured to extract metadata from a DV frame and enable access to the metadata, the DV metadata extraction tool comprising:

an extraction interface configured to maintain an extraction list of DVPackIDs in response to method calls from an application and to store DV packs in a container based on the extraction list of DVPackIDs; and

a container interface configured to store a DV pack-specific data structure[[s]] in the container and to manage access to DV packs and DV pack-specific data structures in response to method calls from the application; and
a multimedia architecture that includes the DV metadata extraction tool.

31. (Canceled)

32. (Previously Presented) A computer comprising:

means for managing a DV metadata extraction list;

means for extracting a DV metadata pack from a DV frame based on a DVPackID within the extraction list; and

means for storing the DV metadata pack into an IMFDVMetadataContainer.

33. (Canceled)

34. (Previously Presented) A computer as recited in claim 32, further comprising means for attaching the IMFDVMetadataContainer to a DV sample of the DV frame.

35. (Previously Presented) A computer as recited in claim 32, further comprising:

means for unpacking the DV metadata pack into a DV pack-specific data structure; and

means for storing the DV pack-specific data structure into the IMFDMetadataContainer.

36-54. (Canceled)